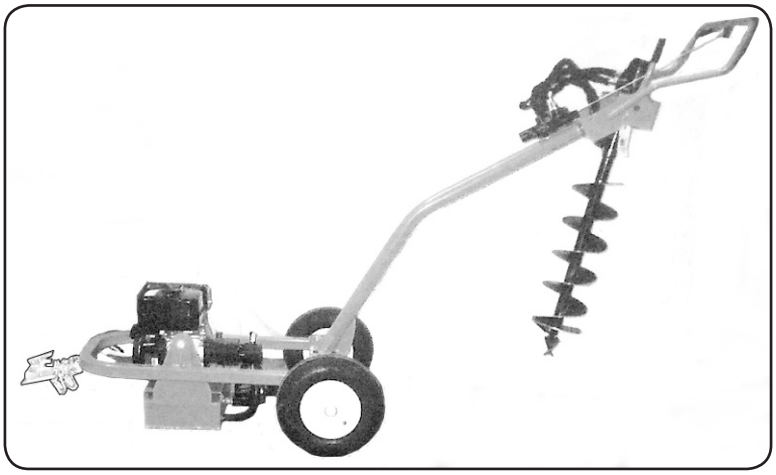
CENTRAL HYDRAULICS®

EARTH AUGER

9 HP ROBIN® ENGINE

Model 94143

SET UP AND OPERATING INSTRUCTIONS



CAUTION
Your warranty is voided if:
1. You do not put hydraulic oil in the Auger's oil assembly prior to its first use. Before each use, check the oil level. Never run the Auger with low or no hydraulic oil. Running the Auger with low or no hydraulic oil will permanently damage the unit.
2. You do not put engine oil in the Engine's crankcase prior to its first use. Before each use, check the oil level. Never run the Engine with low or no engine oil. Running the Engine with low or no oil will permanently damage the unit.

Diagrams within this manual may not be drawn proportionally.
Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.
3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our website at: http://www.harborfreight.com

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

Manual Revised 07k

SPECIFICATIONS

Digging Capacity	8” Diameter x 36” Deep
Hydraulic Pump Type	Single Stage
Auger Drive	2,000 PSI / 110 RPM / 3,800 in-lb Torque with Safety Relief Valve
Auger Bit Size	8” Diameter x 36” Long with Safety Shear Pin (Included)
Controls	Forward and Reverse Operation / Rubber Grip Handles Easy Access Kill Switch On Handle
Tires	Quantity: 2 Size: 4.8/4.00-8 Air Pressure: 60 PSI Load Range: B Maximum Load: 590 lb. Each
Maximum Speed	25 MPH
Hydraulic Oil Capacity	4 Gallons
Recommended Hydraulic Oil	10 Weight
Hitch Type	2” Ball Hitch with Safety Chain
Engine Type	9 HP Robin® / Unleaded Gasoline Powered / Pull Start Automatic Low Oil Shut Down

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES AND PRECAUTIONS

WARNING! Read all instructions
Failure to follow all instructions listed below may result in fire, and/or serious injury.

SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.

2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.

3. **Keep bystanders away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.

2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

3. **Avoid accidental starting. Be sure the Gasoline Engine's Power Switch is in its "OFF" position before moving the Auger *and* before performing any service, maintenance, or cleaning procedures on the unit.**

4. **Remove adjusting keys or wrenches before turning the Auger on.** A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.

5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.

6. **Use safety equipment. Always wear eye protection.** Always wear ANSI-approved safety impact goggles when using this product. ANSI-approved hearing protection, helmet, and steel toed shoes must also be used.

TOOL USE AND CARE

1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

2. **Do not use the Auger if the Gasoline Engine's Power Switch does not turn it on or off.** Any tool that cannot be controlled with its power switch is dangerous and must be replaced.

3. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

4. **Maintain tools with care.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.

5. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

6. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

2. **When servicing a tool, use only identical replacement parts. Follow instructions in the *"Inspection, Maintenance, And Cleaning"* section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES AND PRECAUTIONS

CAUTION

Your warranty is voided if:

a. You do not put hydraulic oil in the Auger's oil assembly prior to its first use. Before each use, check the oil level. Never run the Auger with low or no hydraulic oil.
Running the Auger with low or no hydraulic oil will permanently damage the unit.

b. You do not put engine oil in the Engine's crankcase prior to its first use. Before each use, check the oil level. Never run the Engine with low or no engine oil.
Running the Engine with low or no oil will permanently damage the unit.

1. **Maintain labels and nameplates on the Auger.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

2. ⚠**DANGER! Avoid buried cables and pipes.** The Auger will cut through buried electrical cable and gas pipes, resulting in serious injury or death. Always contact your local utilities companies before drilling.

3. ⚠ **DANGER! Tip-over and crush hazard.** This machine can roll away, tip over, and crush you. Do not drill on inclines steeper than 15 degrees. The Auger is extremely difficult to control on steep inclines.

4. ⚠ **DANGER! This Auger is designed for outdoor use only.** Do not operate the Auger in a closed area or in a poorly ventilated area. When running, the Engine (15) of this Auger produces carbon monoxide, a colorless, odorless, toxic fume that, when inhaled, can cause serious personal injury or death. Whenever possible, use a carbon monoxide detector (not included) to detect excessive carbon monoxide fumes in the work area and in the surrounding area.

5. ⚠ **DANGER! Debris entanglement.** The rotating Bit (65) can get tangled in debris left on the ground, and can result in personal injury and damage to the machine. Before digging, make sure the area is clear of debris that can wind around the Auger during operation.

6. ⚠**DANGER! Rotating Auger hazard.** Entanglement in the Bit (65) will cause serious injury or death. Keep away from the Auger when the Engine (15) is running. Do not clean the Auger while the Engine is on. The Auger can grab objects, such as shovels, and throw them. Do not remove the Hitch Pins (57) or Auger while the Engine is running. Make sure all nuts and bolts are tightened before using.

7. **Before each use, always examine the Auger for proper Tire air pressure (60 PSI), loose bolts and nuts, structural cracks and bends, and any other condition that may affect its safe operation.** Do not use the Auger even if minor damage appears.

8. **Industrial applications must follow OSHA guidelines.**

9. **Never leave the Auger unattended when its Engine (15) is running.** Turn off the Engine, and wait until the Bit (65) completely stops rotating before leaving.

10. **Do not allow children and other unauthorized people to handle or play with the Auger.**

11. **Do not force the Auger.** This machine will do the work better and safer at the speed and capacity for which it was designed.

FIRE AND EXPLOSION PRECAUTIONS

1. **Gasoline fuel and fumes are flammable, and potentially explosive.** Use proper fuel storage and handling procedures. Always have multiple ABC class fire extinguishers nearby.

2. **Keep the Auger and surrounding areas clean at all times.**

3. **When spills of fuel or oil occur, they must be cleaned up immediately.** Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a covered metal container.

4. **Never store fuel or other flammable materials near the Auger.**

5. **Do not smoke, or allow sparks, flames, or other sources of ignition around the Auger.**

6. **Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing.** These events could ignite fumes or vapors.

7. **Do not refill the Fuel Tank while the Engine is running or while the Engine is still hot.** Do not operate the Auger with known leaks in the fuel system.

8. **Use only Engine manufacturer recommended fuel and oil.**

MECHANICAL PRECAUTIONS

1. **Prior to performing service, maintenance, or cleaning procedures, always make sure the Gasoline Engine's Power Switch is in its "OFF" position. Allow the Engine to completely cool. Then, remove the spark plug from the Engine.**

2. **Do not alter or adjust any part of the Auger or Engine that is assembled and supplied by the manufacturer.**

3. **Always follow and complete scheduled Auger and Engine maintenance.**

CHEMICAL PRECAUTIONS

1. **Avoid contact with hot fuel, oil, exhaust fumes, and solid surfaces.**

2. **Avoid body contact with fuels, oils, and lubricants used in the Auger and Engine.** If swallowed, seek medical treatment immediately. Do not induce vomiting if fuel is swallowed. For skin contact, immediately wash with soap and water. For eye contact, immediately flush eyes with clean water.

NOISE PRECAUTIONS

Prolonged exposure to noise levels above 85 dBA is hazardous to hearing. Always wear ANSI-approved hearing protection when operating the Auger.

TOWING PRECAUTIONS

⚠DANGER! Towing hazards. Serious injury or death can occur if these towing rules are not followed:

1. Only tow the Auger with its Bit (65) removed.

2. Be aware of the length the Auger adds to your vehicle.

3. Only tow with the Towing Chains (26) attached to the vehicle. Make sure the Safety Chains are attached to the towing vehicle with the same length for each side. Do not allow the Safety Chains to drag on the ground.

4. Never ride or transport cargo on the Auger.

5. Do not exceed **25 MPH** (or less when conditions warrant) when towing the Auger. **This machine is designed for off-road use only and is not DOT-approved for highway or public road use.**

6. Before towing, always examine the Auger for proper Tire air pressure (60 PSI)

7. Prior to towing the Auger, make sure to read and understand all instructions and safety precautions as outlined in the owner's manual for the towing vehicle. Make sure the towing vehicle is capable of towing the Auger. Make sure the *hitch* on the towing vehicle is capable of towing the Auger. The towing capacity of the hitch is typically stamped on the hitch drawbar.

8. Make sure the Hitch Coupler (22) and the vehicle's ball hitch (not included) are of equal mating size (2") and are rated equal to or greater than the weight of the Auger.

9. Whenever possible, park the Auger on a flat, level surface and chock both Tires (31) to keep the Auger from accidently moving.

10. Care must be taken when backing up the Auger. Only back up the Auger on a straight path. If the Auger is allowed to turn off the straight path while backing up, the machine could jackknife, causing severe damage to the Auger and towing vehicle.

MISCELLANEOUS PRECAUTIONS

1. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near engine's magneto or recoil starter.

2. The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts List on page 20** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

ASSEMBLY INSTRUCTIONS

To Connect The Boom To The Frame Assembly:

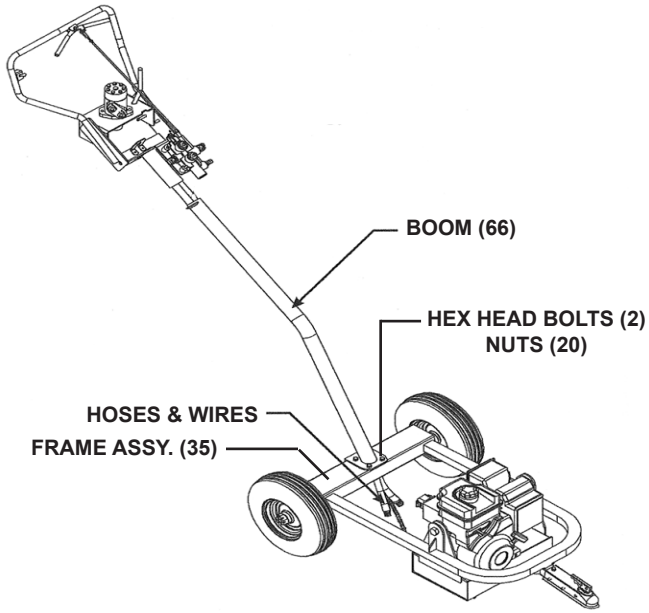


FIGURE A

1. Feed the Hoses and Wires extending from the bottom of the Boom (66) through the opening at the rear of the Frame Assembly (35). **(See Figure A.)**

2. Use the *six* Hex Head Bolts (2) and *six* Nuts (20) to secure the Boom (66) to the Frame Assembly (35). **(See Figure A.)**

To Adjust The Handle Angle:

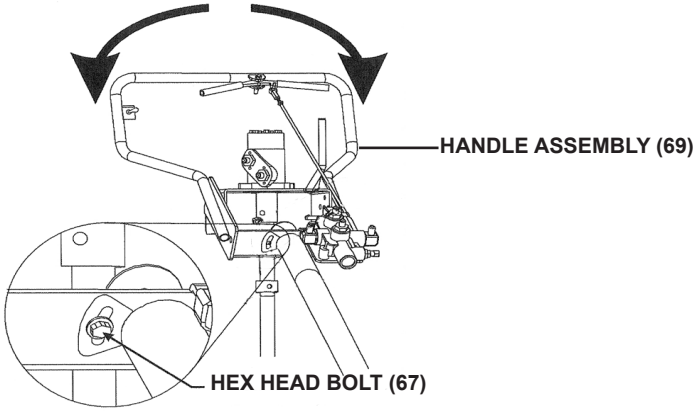


FIGURE B

1. The Handle Assembly (69) can be adjusted 16° to the left and 16° to the right. This will allow you to operate the Auger on uneven surfaces. **(See Figure B.)**

2. Loosen the Hex Head Bolt (67) to rotate the Handle Assembly (69). Once the Handle Assembly angle has been adjusted, firmly retighten the Hex Head Bolt. **(See Figure B.)**

To Connect The Hydraulic Hoses:

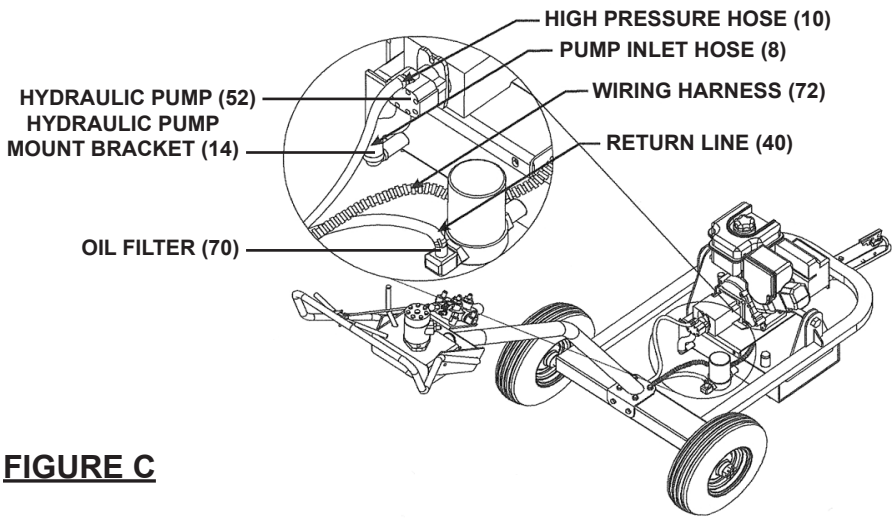


FIGURE C

1. Make sure there is enough slack in the Hydraulic Hoses and Wiring Harness (72) to form a large, vertical loop. This will prevent the Hoses and wires from pulling taut while the engine pivots during use and, therefore, help the Engine (15) pivot to stay level. **(See Figure C.)**

2. Attach the High Pressure Hose (10) to the Hydraulic Pump (52). Attach the Pump Inlet Hose (8) to the Hydraulic Pump Mount Bracket (14). Then, attach the Return Line (40) to the Oil Filter (70). **(See Figure C.)**

To Connect The Wiring Harness:

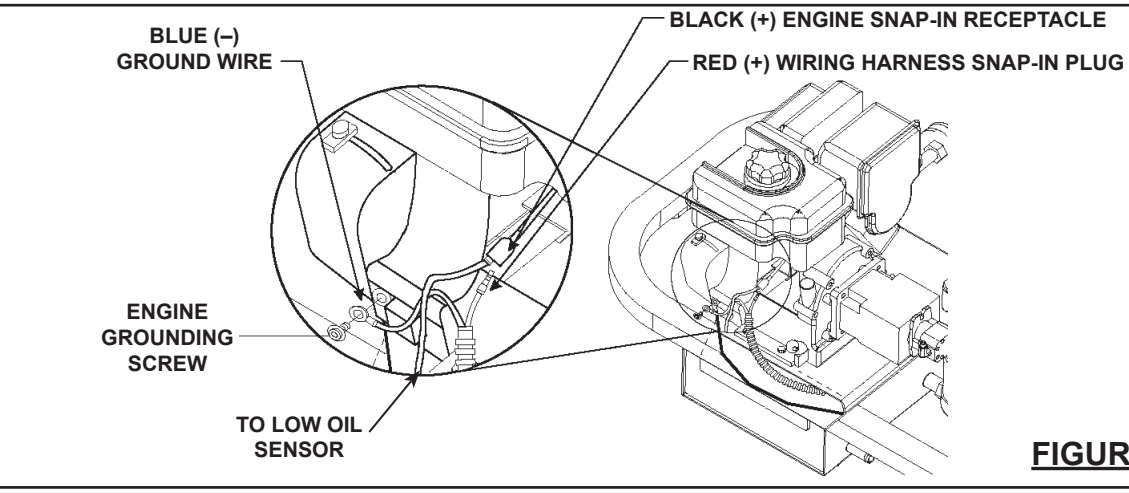

BLUE (–) GROUND WIRE
BLACK (+) ENGINE SNAP-IN RECEPTACLE
RED (+) WIRING HARNESS SNAP-IN PLUG
ENGINE GROUNDING SCREW
TO LOW OIL SENSOR

FIGURE D

1. Locate the BLUE Ground (–) Wire in the Wiring Harness. Then secure the BLUE Ground Wire, using a bolt located on the Engine's (15) Mount. **(See Figure D.)**

2. Locate the RED Snap-In Plug (+) in the Wiring Harness. Then connect the RED Snap-In Plug to the BLACK Snap-in Receptacle extending from under the Engine's (15) Gas Tank. **(See Figure D.)**

To Attach The Auger Coupler:

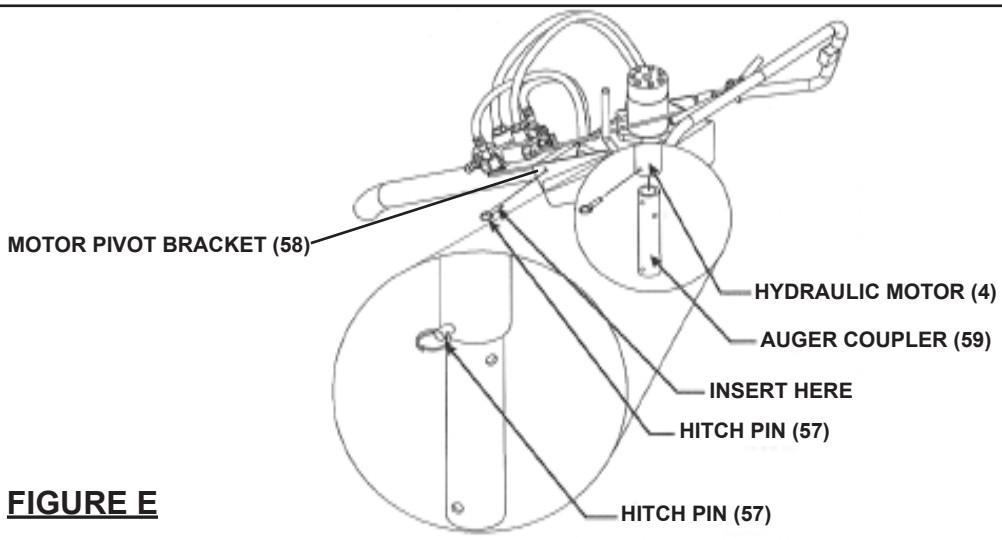


FIGURE E

1. Locate the end of the Auger Coupler (59) with two holes. This is the end of the Auger Coupler that points up into the Hydraulic Motor (4). **(See Figure E.)**

2. Slide the Auger Coupler (59) into the Hydraulic Motor (4), and lock the Auger Coupler in place, using one Hitch Pin (57). **(See Figure E.)**

3. Insert one Hitch Pin (57) into the Motor Pivot Bracket (58). This Hitch Pin will be used when moving and towing the Auger. **(See Figure E.)**

To Attach An Bit:

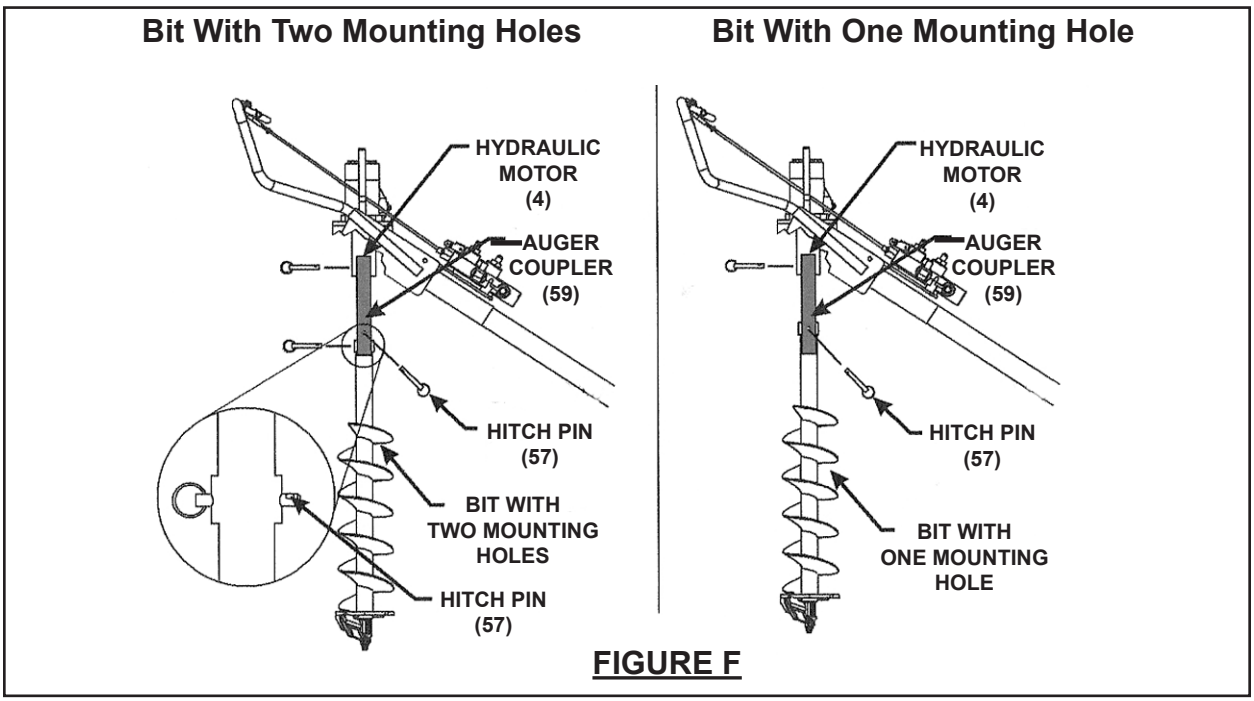


FIGURE F

1. Slide the Bit (65) onto the Auger Coupler (59) until the mounting hole in the Bit aligns with the mounting hole in the Auger Coupler. Then lock the Bit in place, using one Hitch Pin (57). **(See Figure F.)**

2. **NOTE:** If an Bit (65) has two mounting holes, lock the Bit in place using two Hitch Pins (57). Both Hitch Pins are required on Bits with two mounting holes. **(See Figure F.)**

3. Check to make sure all Hitch Pins (57) used extend completely through the mounting holes and out the far side of the connection. **(See Figure F.)**

PRE-OPERATING INSTRUCTIONS

⚠**DANGER!** Always make sure the Auger's Kill Switch (68) and the Gasoline Engine's Power Switch are in their **"OFF"** positions prior to performing any service, maintenance, or cleaning of the Auger or Engine.

To Add Engine Oil:

1. **IMPORTANT!** Prior to first using the Auger, the Engine **MUST** be filled with a high quality 10W-30 grade engine oil.
   (See Engine manufacturer's manual for complete instructions.)

2. To do so, *unscrew* and remove the Engine Oil Dipstick. Pour approximately 3/4 quart of engine oil into the Dipstick Hole. **Do not overfill.**

3. Clean the Oil Dipstick. Then screw the Dipstick fully back into the Dipstick Hole. Unscrew and remove the Oil Dipstick again, and observe the level of engine oil on the Dipstick. The oil level should appear between the **"MINIMUM"** and **"MAXIMUM"** indicator marks on the Oil Dipstick.

4. If necessary, continue adding engine oil, while rechecking the Oil Dipstick, until the oil level reaches the **"MAXIMUM"** indicator on the Oil Dipstick.
   Do not exceed the "MAXIMUM" indicator mark on the Oil Dipstick.

5. When finished adding engine oil, carefully screw the Oil Dipstick back into the Dipstick Hole.

To Fill The Fuel Tank:

1. Prior to first using the Auger, the Engine's Fuel Tank **MUST** be filled with **unleaded** gasoline. **(See Engine manufacturer's manual for complete instructions.)**

2. To do so, remove the Fuel Tank Cap and fill the Fuel Tank with unleaded gasoline. Then, replace the Fuel Tank Cap. Thereafter, check the Fuel Tank for the amount of unleaded gasoline. When necessary, refill the Fuel Tank.
   (See Engine manufacturer's manual for complete instructions.)

To Add Hydraulic Oil:

1. **IMPORTANT!** Prior to first using the Auger, the Hydraulic Oil Tank (33) of the unit **MUST** be filled with a high quality **10 weight hydraulic oil**.
   (See Figure G, next page.)

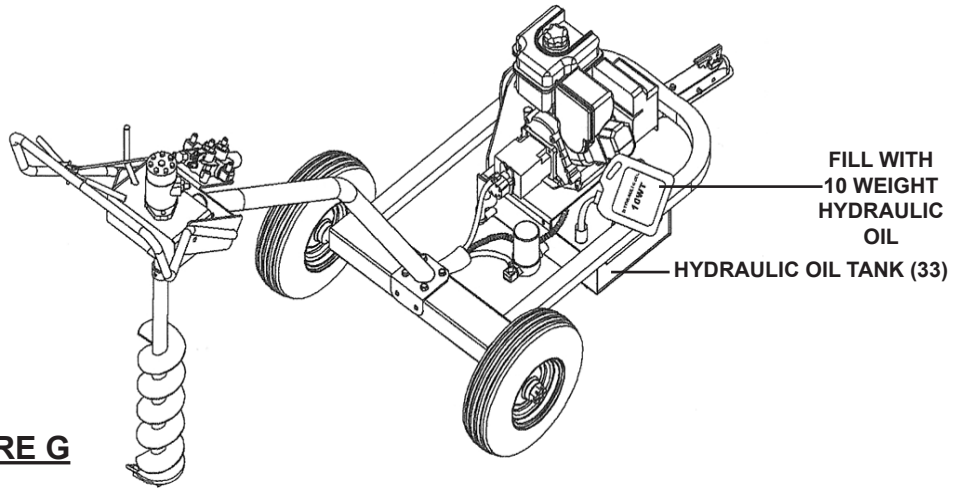


FIGURE G

2. To do so, remove the Hydraulic Oil Tank's Oil Plug (36). Fill the Oil Tank to approximately one inch from the top of the Tank. (The total hydraulic oil capacity is **4 gallons**.) Then, replace the Oil Plug. **(See Figure G, above.)**

3. Make sure the Bit (65) is elevated from the ground surface.

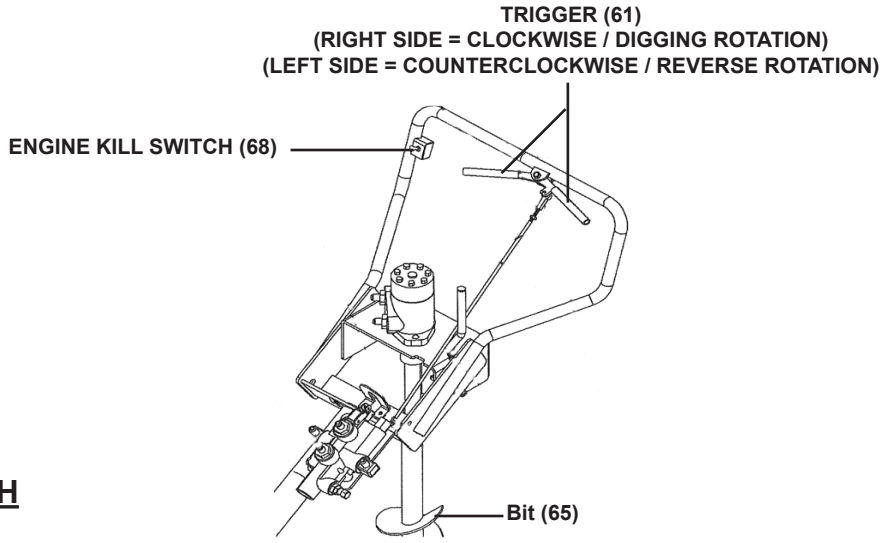

TRIGGER (61)
(RIGHT SIDE = CLOCKWISE / DIGGING ROTATION)
(LEFT SIDE = COUNTERCLOCKWISE / REVERSE ROTATION)
ENGINE KILL SWITCH (68)
Bit (65)

FIGURE H

4. Turn the Auger's Engine Kill Switch (68) to its **"ON"** position.
IMPORTANT: The Engine Kill Switch allows the operator to shut off the Engine (15) while continuing to grip the Handle Assembly (69) with both hands. For safety purposes, the operator must ALWAYS shut off the Engine by turning the Engine Kill Switch to its **"OFF"** position while maintaining a firm grip on the Handle Assembly. **(See Figure H.)**

5. Start the Engine (15) and run at slow idle.
(See Engine manufacturer's manual for complete instructions.)

6. Squeeze the right side of the Trigger (61) until the Bit (65) spins smoothly in a clockwise (digging) rotation. **(See Figure H.)**

7. Turn the Engine Kill Switch (68) to its **"OFF"** position to shut off the Engine. **(See Figure H.)**

8. Wait until the Bit (65) stops rotating. Then relieve the hydraulic system pressure by squeezing the right side of the Trigger (61) several times while the Engine (15) is off. **(See Figure H.)**

9. Remove the Oil Plug (36) and check the hydraulic oil level in the Hydraulic Oil Tank (33). If necessary, fill the Oil Tank to one inch from the top of the Oil Tank. Then, replace the Oil Plug. **(See Figure G.)**

10. Squeeze the left side of the Trigger (61) several times. Then, repeat Step #9.

OPERATING INSTRUCTIONS

1. Turn the Auger's Engine Kill Switch (68) to its **"ON"** position.

2. Start the Engine (15) and run at slow idle.
(See Engine manufacturer's manual for complete instructions.)

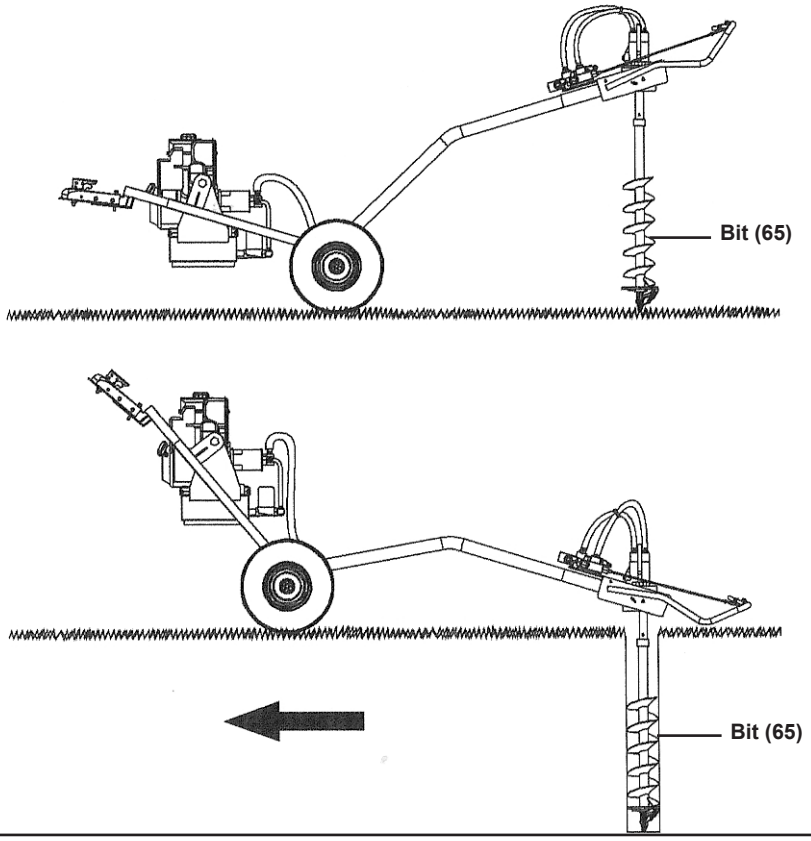


FIGURE I

3. Use the Handle Assembly (69) to position the Bit (65) bit to the center of the hole to be dug. **(See Figure I.)**

4. Squeeze the right side of the Trigger (61) to dig. **(See Figure H.)**

5. As you dig, push the Auger away from you. This will compensate for the pivoting action of the machine and keep your hole straight and vertical. **(See Figure I.)**

6. Periodically, lift the Bit (65) to clear loose dirt from the hole. This will help to keep the Auger from binding as well as minimize the dirt being lifted out of the hole. **(See Figure I.)**

7. If the Bit (65) becomes stuck, squeeze the left side of the Trigger (61) to reverse the rotation of the Auger. **(See Figure H.)**

8. When the desired depth of the hole is reached, squeeze the left side of the Trigger (61) while raising the Bit (65) completely out of the hole.

9. Turn the Engine Kill Switch (68) to its **"OFF"** position to shut off the Engine. **(See Figure H.)**

Before Moving The Auger:

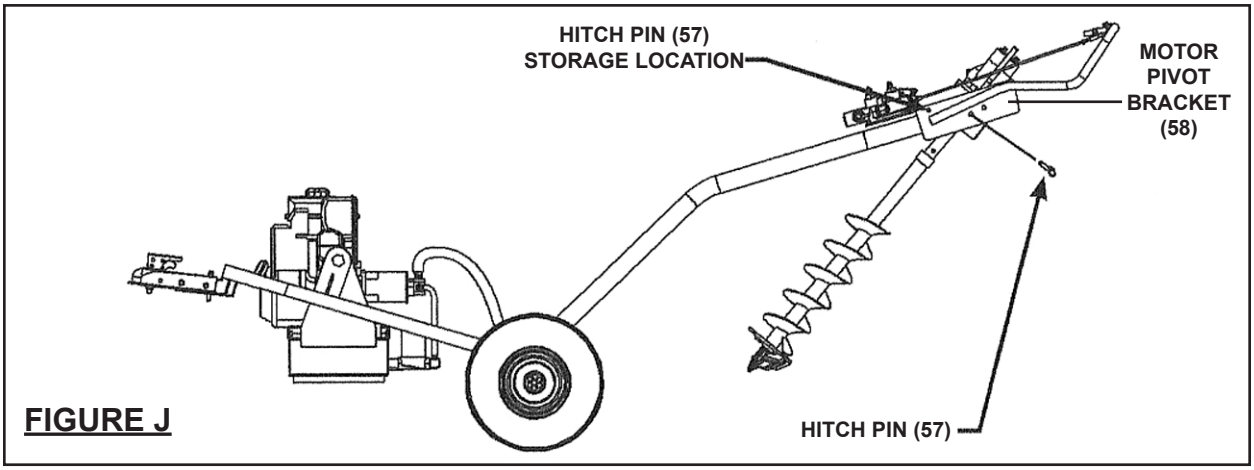


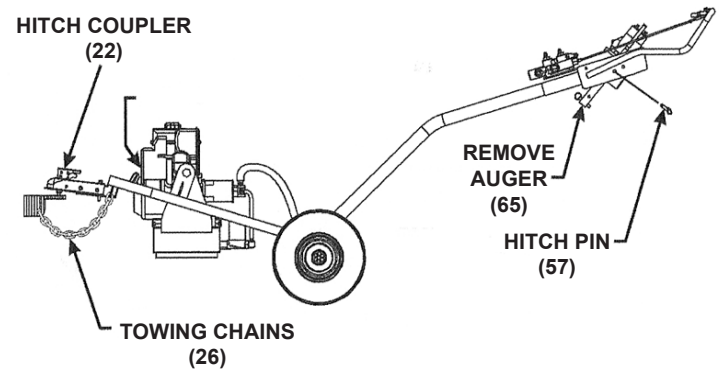
FIGURE J

Lock the Hydraulic Motor (4) in its upright position by inserting one Hitch Pin (57) into the Motor Pivot Bracket (58). **(See Figure J.)**

To Tow The Auger:

⚠**DANGER! Serious injury or death can occur if the towing precautions and instructions on pages 7, 15, and 16 of this manual are not followed:**

1. Remove the Bit (65) from the machine. **(See Figure F.)**

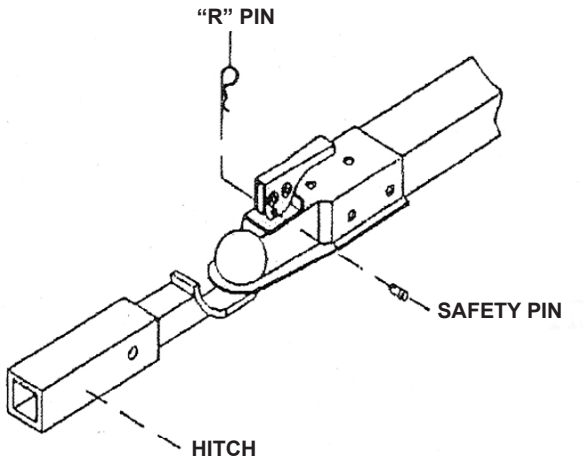


DANGER!

IMPORTANT INFORMATION

This Auger's Hitch Coupler (22) **MUST** be properly secured to the hitch ball of the towing vehicle. After attachment, pull up and down on the Hitch Coupler to make sure the hitch ball is fitting snugly in the Hitch Coupler. **There must be no play between the hitch ball and Hitch Coupler.** If there is play, tighten the Adjustment Nut until no play is present. If the Adjustment Nut is too tight, the Handle will not lock. **Carefully read and follow the complete instructions in this Manual BEFORE setup or use.**

If the Hitch Coupler is not secured properly, the hitch ball could come loose while the Auger is in motion, possibly causing property damage, SERIOUS PERSONAL INJURY, or DEATH.



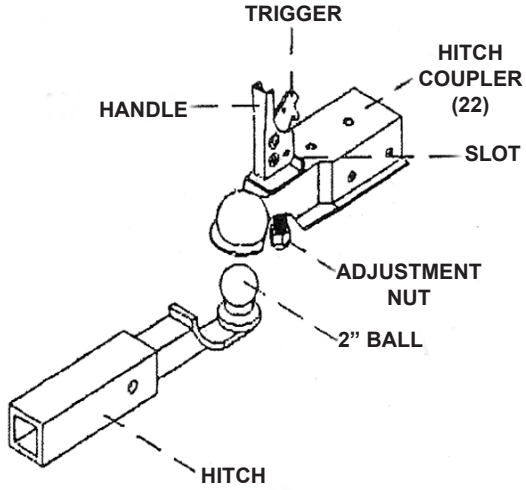


FIGURE K

2. Lock the Hydraulic Motor (4) in its upright position by inserting one Hitch Pin (57) into the Motor Pivot Bracket (58). **(See Figure K.)**

3. Make sure the Fuel Valve of the Engine (15) is completely closed. (See Engine manufacturer's manual for complete instructions.)

4. Only use a **2"** Ball Hitch (not included) on the towing vehicle. **(See Figure K.)**

5. **NOTE:** To reduce friction between the 2" Ball Hitch and Hitch Coupler (22), apply a layer of heavy grease over the Ball Hitch. **(See Figure K.)**

6. Temporarily remove the "R" Pin and Safety Pin from the Hitch Coupler (22). Then, pull up on the Trigger and lift up on the Handle. **(See Figure K.)**

7. With assistance, place the Hitch Coupler (22) over the vehicle's Hitch Ball and push down on the Handle until the Trigger locks in the slot. Pull up and down on the Coupler to make sure the Hitch Ball is fitting snugly in the Coupler. There should be no play between the Hitch Ball and Coupler. If there is play, tighten the Adjustment Nut until no play is present. If the Adjustment Nut is too tight, the Handle will not lock. **(See Figure K.)**

8. Reinstall the Safety Pin and "R" Pin. **(See Figure K.)**

9. Make sure to attach each Towing Chain (26) equally to the towing vehicle's rear bumper or frame. **(See Figure K.)**

10. ⚠**CAUTION!** Care must be taken when backing up the Auger. Only back up the Auger on a straight path. If the Auger is allowed to turn off the straight path while backing up, the Auger could jackknife, causing severe damage to the Auger and towing vehicle.

11. When towing the Auger over long distances, stop and check the tightness of all connections frequently to ensure safe operation.

INSPECTION, MAINTENANCE, AND CLEANING

⚠**DANGER!** Make sure the Engine Kill Switch (68) of the Auger is in its **"OFF"** position and the Power Switch of the Engine is in its **"OFF"** position prior to performing any inspection, maintenance, or cleaning of the machine.

1. **Before each use,** inspect the general condition of the Auger. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, damaged hydraulic hoses, loose hydraulic hose fittings, and any other condition that may affect the safe operation of the Auger. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

2. **Before each use,** check the Engine oil level. If necessary, fill the crankcase of the Engine with the proper amount and type of engine oil. **Refer to the Engine manufacturer's manual for all inspection, maintenance, and cleaning instructions.**

3. **Before each use,** check the hydraulic oil level. If necessary, remove the Hydraulic Oil Tank's Oil Plug (36). Fill the Hydraulic Oil Tank (33) with **10 weight** hydraulic oil to approximately one inch from the top of the Tank. (The total hydraulic oil capacity is **4 gallons**.) Then, replace the Oil Plug. **(See Figure G, page 13.)**

4. **After every 50 hours of use,** drain the old hydraulic oil and refill the Hydraulic Oil Tank (33) with **10 weight** hydraulic oil.

5. **To check and adjust the Linkage:**

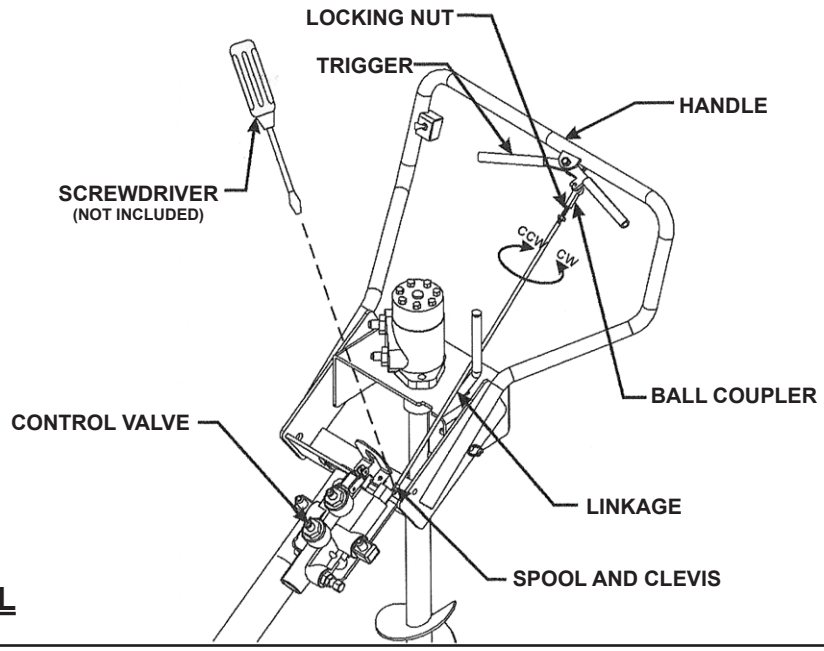


FIGURE L

a. Squeeze the right side of the Trigger (61). Check to see that the Spool in the Control Valve is pushed in against its stop. If the Trigger hits against the Handle before the Spool is pushed in against its stop, the Linkage needs to be adjusted. **(See Figure L.)**

b. Squeeze the left side of the Trigger (61). Check to see that the Spool in the Control Valve is pulled out against its stop. Once again, if the Trigger hits against the Handle before the Spool is pulled out against its stop, the Linkage needs to be adjusted.
(See Figure L.)

c. To adjust the Linkage, place a screwdriver into the Spool clevis to keep the Linkage from turning. Loosen the Locking Nut from the Ball Coupler.
(See Figure L.)

d. If the right side of the Trigger (61) needs to be adjusted, turn the Linkage counterclockwise (CCW). If the left side of the Trigger (61) needs to be adjusted, turn the Linkage clockwise (CW). **(See Figure L.)**

e. Check your progress periodically by squeezing the right side of the Trigger (61). The Linkage has been properly adjusted when the Spool is pushed in against its stop at the same time the Trigger hits the Handle. **(See Figure L.)**

6. **NOTE:** Always dispose of old engine oil and old hydraulic oil in accordance with local, state, and federal regulations.

⚠**CAUTION! All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.**

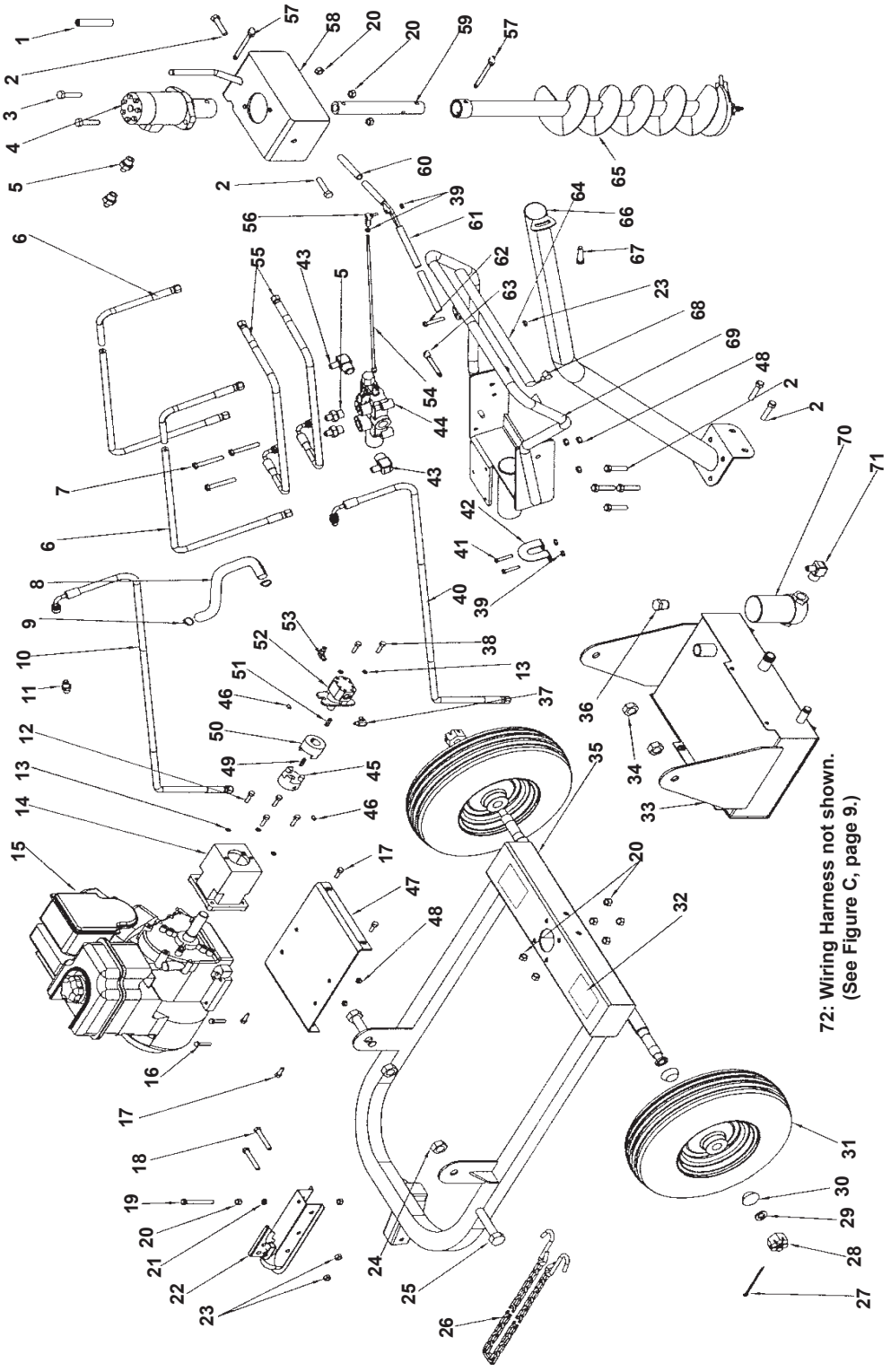
PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST

Part	Description	Qty.	Part	Description	Qty.
1	Handle	1	37	90° Elbow Fitting (#3)	1
2	Hex Head Bolt (M12 x 25)	1	38	Hex Head Bolt (M8 x 25)	2
3	Hex Head Bolt (M12 x 40)	2	39	Hex Nut (M6)	4
4	Hydraulic Motor	1	40	Return Line	1
5	Elbow Fitting (#1)	4	41	Hex Head Bolt (M6 x 20)	2
6	Hose Assembly (#2)	2	42	Hose Retaining Bracket	1
7	Hex Head Bolt (M8 x 50)	3	43	90° Elbow Fitting (#4)	3
8	Pump Inlet Hose	1	44	Control Valve	1
9	Hose Clamp	2	45	Coupling (Engine Side #2)	1
10	High Pressure Hose	1	46	Hex Screw (M8 x 12)	2
11	90° Elbow Fitting (#2)	2	47	Engine Mount Plate	1
12	Hex Head Bolt (5/16”-24UNC x 1” L)	4	48	Hex Nut (M8)	7
13	Spring Washer (#8)	6	49	Pump Key (6.35 x 6.35 x 18)	1
14	Hydraulic Pump Mount Bracket	1	50	Coupling (Engine Side #1)	1
15	9 HP Robin® Engine	1	51	Pump Key (3.715 x 3.715 x 18)	1
16	Hex Head Bolt (M8 x 35)	4	52	Hydraulic Pump	1
17	Hex Head Bolt (M8 x 20)	4	53	90° Elbow Fitting (#5)	1
18	Hex Head Bolt (M10 x 70)	2	54	Linkage Assembly	1
19	Hex Head Bolt (M10 x 90)	1	55	Hose Assembly (#1)	2
20	Nut	8	56	Ball Joint Coupler	1
21	Washer (#10)	1	57	Hitch Pin (3/8” x 2” x 1-1/2”)	2
22	Hitch Coupler (For 2” Ball)	1	58	Motor Pivot Bracket	4
23	Hex Nut (M10)	4	59	Auger Coupler	2
24	Hex Nut (M20)	2	60	Handle Grip	2
25	Hex Nut (M20 x 50)	2	61	Trigger	2
26	Towing Chain	2	62	Hex Head Bolt (M10 x 35)	1
27	Cotter Pin (1/8” x 2”)	4	63	Spindle	1
28	Spindle Nut	2	64	Rubber Grip	1
29	Washer (#18)	2	65	Bit	1
30	Bearing	4	66	Boom	1
31	Wheel/Tire Assembly	2	67	Hex Head Bolt (M10 x 25)	1
32	Nameplate	2	68	Engine Kill Switch	1
33	Hydraulic Oil Tank	1	69	Handle Assembly	1
34	Reservoir Pivot Nut (3/4” x 10)	2	70	Oil Filter	1
35	Frame Assembly	1	71	Connector	4
36	Oil Plug (3/4”-14UNC)	1	72	Wiring Harness	1

ASSEMBLY DRAWING



72: Wiring Harness not shown. (See Figure C, page 9.)

NOTE:
Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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